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AUTHOR Brennan, Jewel E.
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ABSTRACT

Alcoholism is a problem of immense proportions. Views about alcoholism range from consideration of the problem as a moral weakness to the disease concept approach. Since the effects of alcoholic intake can be benevolent as well as toxic, the dilemma centers around alcohol usage. Various theories have been formulated, experimented with, and researched about the physiological, sociological, and psychological aspects of alcoholism. A variety of symptoms evidence the progression of alcohol addiction in the abuser. Treatment which considers the physical, social, and psychological etiology of the problem represents a continuum of care. New Jersey has implemented the Alcohol Treatment and Rehabilitation Act, mandated coverage for alcoholism by health insurance carriers, and regulated intoxicated driving offenses. Funding for rehabilitation programs has been initiated on federal and state levels and model programs have been developed. (Although geographically specific, this document provides a comprehensive overview of alcoholism services and could serve as a model for similar programs.) (Author)

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SETON HALL UNIVERSITY

SCHOOL OF EDUCATION

DEPARTMENT OF COUNSELING AND SPECIAL SERVICES

The Continuum of Care for the Alcoholic in New Jersey
Principles & Problems in Planning of Treatment & Rehabilitation

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Culminating Project
January 15, 1978

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Abstract

Alcoholism is a problem of immense proportions. In New Jersey it affects an estimated 350,000 alcoholics, their families, friends, employers, and neighbors. Views about alcoholism range from consideration of the problem as a moral weakness to the disease concept approach. The effects of alcoholic intake can be benevolent as well as toxic, and so the dilema centers about its usage. Various theories have been formulated and experimented with and researched about the physiologic, sociologic, and psychological aspects of alcoholism. A variety of symptoms evidence the progression of alcohol addiction in the individual abuser. Treatment must consider the physical, the social, and the psychological etiology of the problem. Such treatment can be thought of as a continuum of care. New Jersey has implemented recent legislation, such as the Alcohol Treatment and Rehabilitation Act, mandated coverage for alcoholism by health insurance carriers, and regulations for intoxicated driving offenses. Funding for rehabilitation programs has been initiated on federal and state levels. Model programs, utilizing these funds have already begun, but it may take several years before they are available statewide. Alcohol has been a part of the history of man for centuries, and will undoubtedly be a part of life in the future. Whether alcohol will serve man or man will serve alcohol will depend on an understanding and proper use by the society as a whole, as well as the individual.

Alcoholism is a problem of immense proportions. The statistics about alcohol and alcoholism are almost always underestimates. Of the more than 90 million Americans who take alcoholic beverages, about 10% of them are alcoholic. In New Jersey approximately 350,000 residents are estimated to be alcoholic in a population of 740 million (New Jersey Department of Health, 1974). Yet each of these alcoholics is more than a statistic. Each of these alcoholics has family members, friends, employers, neighbors who are affected by his or her drinking problem. To these persons, no alcoholic is a statistic, but rather a person with a face and a name, often a close loved one. Excessive drinking often contributes to unhappy marriages, broken homes, impoverished families, and deprived or displaced children. The cost of providing for and supporting families affected by alcoholism has been calculated as millions of dollars per year. Other effects of the problem surface in job inefficiency, job loss, accidents, crime and violence, birth defects, and spiralling medical costs. Yet the cost in terms of human suffering is incalculable.

According to a special Health, Education, and Welfare Department report to the nation in 1971, alcohol is the most abused drug in the United States (Silverstein, 1975), and the rate of alcoholism is on the rise. More recent figures gathered by the National Institute on Alcohol Abuse and Alcoholism found that alcoholism is the nation's third-largest

health problem, after heart disease and cancer. It accounts for thirteen thousand deaths each year from cirrhosis of the liver alone, and alcohol is implicated in numerous cases of heart disease, infectious diseases, murders and suicides, industrial accidents, and at least half of the deaths and injuries on the highways (Silverstein).

A recent study[1] at Princeton House, the psychiatric unit of the Medical Center at Princeton, underscores the concept of the incredibly high hidden mortality rate for alcoholics (Penick, 1977). Research in this area is difficult because death certificates often list alcohol-related fatalities under other causes, i.e., death by gun shot wounds, by auto, by drowning, etc. Post-mortem follow ups were done on 50 New Jersey residents who were alcoholics and not sober at the time of death. Ten causes of death for these cases, in order of incidence, were listed: 1) suicide; 2) vehicular accidents; 3) drownings (52% of all drowning victims at the New Jersey shore in 1974, had alcohol blood levels higher than .05); 4) accidental overdose (difficult to separate from suicide) in combination with drugs; 5) fire (most often carelessness on the part of female housewives); 6) exposure; 7) homicide (often in taverns by another alcoholic); 8) asphixiation (gag reflex is lowered in advanced alcoholism); 9) aspiration-pneumonia (alcohol-induced coma is a chemically induced pneumonia difficult to treat); 10) acute alcohol poison (rare).

There is also a strong correlation between crime and

alcohol, both nationally and in New Jersey (Perez, 1976). Police, courts, and correctional institutions cost the U.S. 10.5 billion dollars annually to maintain. Over one-half billion of that total cost is spent processing persons who commit violent and anti-social crimes linked to alcohol abuse. In 1971, 41% of all arrests or 3.5 million nationwide, were alcohol related offenses. Arrests and court costs for violent alcohol-related crimes were calculated as nearly 255 million dollars.

An association with alcohol was recorded in 64% of all murders, 41% of all assaults, 34% of all forcible rape, 33% of suicides and 29% of all other sex crimes. During 1971, 35,000 persons were incarcerated for violent crimes associated with alcohol abuse (DHEW, 1971).

Relating these studies to New Jersey, Perez's research points out that a survey of inmates of state correctional facilities (1974) showed an estimated 43% of all inmates reported that they had been drinking alcoholic beverages at the time of the "present" or subsequent offense for which they were incarcerated (USDJ-LEAA, 1974), (See Table I). In correctional institutions throughout the state (including youth correctional facilities) about 20% or 1,200 of the estimated 6,000 state prison population have alcohol problems (See Table II).

Generally, alcohol appears to be more related to crimes against the person than to property crimes, and robbery related to alcohol is difficult to estimate. There is evidence

Estimated New Jersey Alcohol Related Violent Crime Arrests in 1974

Offense Charged	Total Arrests	Percent[1] Alcohol Related	Estimated Number Alcohol Related Arrest
Homicide (Murder and Manslaughter)	627	64%	401
Forcible Rape Includes Attempts and Assault to Rape	897	34%	304
Assault (Atrocious and Other)	38,407	41%	15,746
Sex Offenses (Except Forcible Rape and Prostitution)	2,164[2]	29%	627
Totals	42,095		17,078

est. 40% of all New Jersey violent crime arrests are alcohol related.

1. Alcohol and Health, New Knowledge, 2nd Special Report to the U.S. Congress, June 1974, U.S. Dept. of HEW, PHS, NIAAA, pp. 56

2. Crime in New Jersey 1974, Uniform Crime Reports, State of New Jersey, Division of State Police.

Table I

Alcohol consumption of inmates at the time of the "present" or subsequent offense resulting in imprisonment

Item	Number of inmates	Percent of inmates
Total	191,400	100
Drinking at time of offense	81,700	43
Beer only	19,400	10
Light	10,300	5
Moderate	3,800	2
Heavy	5,300	3
Wine only	7,900	4
Light	2,300	1
Moderate	1,900	1
Heavy	3,700	2
Liquor only	32,400	17
Light	7,600	4
Moderate	7,300	4
Heavy	17,400	9
Beer and wine	2,900	2
Light	600	(Z)
Moderate	800	(Z)
Heavy	1,500	1
Beer and liquor	11,100	6
Light	1,400	1
Moderate	1,700	1
Heavy	8,000	4
Wine and liquor	1,400	1
Light	[1]100	(1Z)
Moderate	300	(Z)
Heavy	1,000	1
Beer, wine, and liquor	6,600	3
Light	400	(Z)
Moderate	800	(Z)
Heavy	5,400	3
Not drinking at time of offense	107,600	56
Don't know and not reported	2,100	1

NOTE: Detail may not add to totals shown because of rounding. Percent distribution based on unrounded figures.

Z Less than 0.5 percent.

[1]Estimate, based on about 17 or fewer sample cases, is statistically unreliable.

Source: Survey of Inmates of State Correctional Facilities 1974, U.S. Department of Justice LEAA, National Criminal Justice,p.26

Table II

however, to suggest alcohol as a secondary factor in bad check writing and petty thefts. Often the motivation is that chronic alcoholics generally do not hold jobs and are in need of funds (Cahn, 1970).

The preceding facts and figures portray a grim picture of alcoholism both nationally and in the Garden State. Yet the chances for recovery, if an alcoholic is given proper treatment and rehabilitation services, are high. Three out of four alcoholic men and women are reasonably well accepted members of their communities (DHEW, #74-23, 1975). A measure of successful rehabilitation is considered as the ability of the alcoholic patient to maintain and/or reestablish good family life, work record, and respectability in the community. Relapses can and do occur, but they do not mean the treatment effort has failed. Early treatment intervention, competence of therapists, availability of hospital and outpatient services, and the strong support of family, friends, employers, and community are essential ingredients in stabilizing recovery. Alcoholics Anonymous, Al-anon, and Ala-A-Teen are some of the better known community organizations offering supportive services to alcoholics and their concerned families and friends. In New Jersey each week, over 3,000 meetings of these three organizations are held in various parts of the state. [2]

Alcohol abuse is the most serious drug abuse problem in New Jersey, as it is for the nation. Control over this situation will depend on the organization of resources of many

groups, individuals, and institutions. Solutions require a multiple approach utilizing the abilities of various professional groups as well as the latent resources of the alcoholics themselves.

THE NATURE OF ALCOHOLISM

A review of the literature on alcoholism indicates a variety of approaches to defining alcoholism, ranging from the concept that alcoholsim is a moral weakness to criminally punishable behavior to an addiction problem or a culturally induced social problem and finally a disease to which some persons are more prone than others. Block (1962) reviews some of the more accepted definitions as follows:

E.M. Jellinek, former consultant to the World Council of Alcohol: Alcoholism is a progressive disease characterized by uncontrollable drinking.

Howard J. Clinebell: An alcoholic is anyone whose drinking interferes frequently or continuously with any other important life adjustment or interpersonal relationship.

Harold W. Lovell, former President of the NCA: Alcoholism is a condition characterized by uncontrollable compulsive drinking.

Marty Mann, Founder and Executive Director of NCA: The disease which manifests itself chiefly by the uncontrollable drinking of the victim who is known as the alcoholic.

World Health Organization's Expert Committee: Any form of

drinking which in its extent goes beyond the tradition and customary "dietary" use or the ordinary compliance with the social customs of the whole community concerned, irrespective of the etiological factors leading to such behavior, and irrespective also to the extent of which such etiological factors are dependent upon heredity, constitution, or acquired physiopathological and metabolic influences. (pp.20-21).

Block himself, holds that alcoholism is a deviate pattern of social behavior, adding to the above definitions the point that such behavior has a "continuing adverse effect upon the individual or his family or the community". Bacon (1962) emphasized further, the sociocultural theme stating that cultural and subcultural mores determine the recognition of alcoholism as a problem, the stigma attached, and the course taken for treatment or avoidance of treatment. Murphy (1961) reviews Jellinek's major works and reports that Jellinek distinguishes five major types of alcoholics:

1) Alpha: Alcohol is primarily used to relieve psychological threat or pain. This pattern is not totally uncontrollable, abstaining is not unattainable, and the pattern is not progressive.

2) Beta: In this group numerous physical symptoms occur with the dependence on alcohol.

3) Gamma: There is increased tissue tolerance to alcohol and adaptive cell metabolism. Withdrawl symptoms and craving occur. A loss of control is present, and the

disease progresses from psychological to physical. Marked behavior changes occur. This is the most common type of alcoholism found in the United States.

4) Delta: This group is differentiated only from the Gamma type in that the loss of control is replaced by the inability to abstain.

5) Epsilon: This category describes the periodic alcoholic. An individual in this category formerly was more commonly classified as dipsomaniac. (p.164)

Fox (1957) uses a more behavioral approach and develops three typologies: those individuals who began drinking following a traumatic incident, those persons who drink to relieve neurotic symptoms later in life, and those alcoholics who began drinking early due to pathological reasons or for no apparent reason. Bolman (1965) argues that there are two types of alcoholics, essential and reactive. Essential alcoholism exists when no apparent reason can be found and the pattern develops early in life. Reactive alcoholism follows an unpleasant situation or event and an individual who had functioned adequately in adult life regresses to an escape through drinking.

The American Psychiatric Association (1968) defines the alcoholic as "a person who as the consequence of consuming excessive amounts of alcohol follows patterns of behavior that substantially impede his vocation, social and psychological adjustment. His pathological use of alcohol may be and probably is the consequence of some other pathological

condition." Alcoholics Anonymous defines alcoholism after the disease model as well holding that it is a progressive illness which can never be cured but which like some other illnesses can be arrested (1952).

In 1977 New Jersey officially joined the trend to viewing alcoholism as a disease in the passage of ATRA, the Alcohol Treatment and Rehabilitation Act. It is a repeal of Public Law 1948, c.453 (c.26:2B-1). Its aim is the legal consideration of alcoholism as a disease rather than a moral or criminal problem subject to arrest and penalties. New Jersey is approximately the 20th state to legislate a disease-model view of alcoholism. The official declaration on this point is

> It is the policy of the State of New Jersey that alcoholics and intoxicated persons may not be subjected to criminal prosecution because of their consumption of alcoholic beverages, but rather should be afforded a continuum of treatment in order that they may lead normal lives as productive members of society. (C26: 2B-7)

"Alcoholic" is defined within the law to mean "any person who chronically, habitually, or periodically consumes alcoholic beverages to the extent that 1) such use substantially injures his health or substantially interferes with his social or economic functioning in the community on a continuing basis, or 2) has lost the power of self-control with respect to the uses of beverages."

THE CHEMICAL PROPERTIES OF ALCOHOL

Ethanol is the basic substance in alcoholic beverages (DHEW: HSM-72-9099, 1971). Another name for this chemical is ethyl alcohol or the formula CH_3CH_2OH. This compound has remarkable and seemingly magical properties as it induces euphoria, sedation, intoxication, and narcosis. Other alcohols, i.e. methly and isopropyl, have immediate toxic effects that make them unsuitable for drinking. Ethanol however is the desired ingredient in the three major classes of alcoholic beverages, distilled spirits, wines, and beers.

Archaeologic records of ancient civilizations indicate that man discovered alcohol very early. Alcohol can be formed when fermentation is started in sugar-containing plants by yeast in the enviornment. Sugar is thereby converted to alcohol. Ancient man, leaving fruits or berries exposed to the warm air may have accidentally discovered the effects of crude wine. Accidental discovery then moved to purposeful production of alcoholic beverages.

Until about the 16th century when distillation methods came into use, alcoholic beverages were obtained from fermentation and consisted of wines and beers containing about 14% alcohol. Fermentative yeasts cannot survive in solutions stronger than 14%. The yield of alcohol is also limited by the amount of available sugar, and the willingness of the producer to wait until the maximum possible yield is obtained. Thus even today many fermented beverages contain less than 14%. With the introduction of distillation methods,

alcohol could be produced from grains and tubers and liquids containing as much as 50% and more alcohol became available.

In addition to the mood-changing properties of alcohol, man also learned of its food value. Crude alcohol, unlike the present day product, contained nutrients of raw materials including vitamins and minerals. Modern technology has eliminated these food benefits with one exception, calories, usable for heat and energy, and alas for the overconsummer, a source of fat. Each gram of alcohol metabolized in the body yields seven calories. This adds up to approximately 200 calories per fluid ounce of absolute alcohol, or 100 calories per fluid ounce of 100 U.S. proof distilled spirits.

Of itself, ethanol alcohol is toxic to man and must undergo a conversion process during absorption in the human body. Alcohol cannot be digested and is directly absorbed into the blood stream. Alcohol diffusion takes three steps, absorption, transportation in the blood stream, and conversion of alcohol in the liver. These processes vary in individuals depending on a person's size, weight, physical condition, age, and emotional state. Absorption refers to the fact that alcohol cannot be digested so is passed directly through the linings of the stomach and intestines to the blood stream. If an individual imbibes alcohol during or after a heavy meal the absorption process can be slowed down, but the reverse is not true. If one drinks and then eats the process does not take its time because absorption takes place within 20 seconds of reaching the digestive tract. During trans-

portation the alcohol remains in the blood until the liver can perform the conversion process. Thus alcohol blood-level tests can reveal how much of the toxic remains to be converted. The body's Detoxification Center is the liver where conversion takes place at the rate of ½ oz. per hour if the liver is normal and healthy. The liver converts alcohol to acytaldehyd which is also toxic to the body. Normally this compound is joined by Oxygen and enzymes forming acetic acid which can then be expelled through expiration of Carbon Dioxide and through the bladder. Thus if an individual drinks 10 oz. of an alcoholic beverage containing 10% alcohol, his body, given it is in good condition and his emotional state is fairly regulated, will need approximately 12 hours to diffuse the alcohol he has taken. Emotional stress and fatigue are factors because the metabolic ability to absorb alcohol is lowered in these conditions. During the time the body is diffusing alcohol content, three tests can be given to determine the amount of alcohol remaining in the system. At any given time during the diffusion period, a blood level test will reveal 80% of the amount remaining, a urine test will indicate 10% of the amount being diffused and a breath analyzer will show 10% of the amount being eliminated through the lungs. These measures have been standardized so that it is possible for trained personnel to determine both the amount of alcohol imbibed and the amount remaining from the time of intake.[3]

ALCOHOL'S EFFECT ON THE BODY SYSTEMS

The 1971 report of the Task Force of the National Council of Alcoholism supported the relatedness of alcoholism to dysfunctions in all of the body systems (DHEW-HSM 72-9099) (Refer to Table III). Alcoholic beverages produce feelings of pleasure and relaxation for many people. Yet for others, alcohol, even when taken in small amounts, may not result in benign feelings but in increased anxiety, belligerent feelings and disorientation. Heavy drinkers may experience the sequence of tiredness, sleepiness, and finally stupor. These effects are due to the influence of alcohol on the central nervous system.

Alcohol, once ingested, is absorbed from the digestive tract and is circulated to various tissues of the body by the blood. A lesser concentration of alcohol in the blood is required in affecting the function of the brain than would be needed to significantly affect other body tissues. (Carpenter, 1961, 1965; Mello, 1968). The expression of intoxixation as an altered function of the central nervous system is dependent on the speed of its absorption from the stomach and small intestine and to the drinking history of the individual. For some persons, even a few sips of alcohol may alter behavior and this may be due to a conditioned or learned response based on previous drinking experience. Measurable levels of behavior change seem to appear when alcohol blood levels rise to a 0.05 percent concentration. Thought, judgement, restraint become relaxed and the drinker feels free of

his ordinary inhibitions and anxieties and becomes impulsively inclined. This effect is one of the motives for many people who drink alcoholic beverages in moderation.

As more alcohol is consumed the depressant effect on the brain progressively involves more of the nervous syster's functions. As alcohol concentration in the blood rises to .10%, voluntary actions become perceptibly clumsy; at .20% the functions of the entire motor area of the brain are depressed and emotional behavior also becomes affected. The individual may begin to weep, shout, laugh hysterically or become violent with anger. At .30% concentration, the drinker is confused and may begin stupor-like motions. At .40 or higher the individual is unaware of his enviornment and enters comatose state. Higher levels of intoxication beyond .50% may paralyze the medulla which controls respiration and death follows (Shupe, 1954). A distinction must be made, however, in comparing the effects of alcohol concentration in the blood in the person who drinks moderately and the individual who is a chronic alcoholic. Continuous consumption of alcohol over long time spans by an individual seems to alter the effects of the alcohol concentration in the blood. Larger amounts of alcohol are required to produce the same effects, thus the chronic drinker develops a certain "tolerance". This is the basis of addiction or "dependence" (Seevers & Deneau, 1963; World Health Organization, 1964). Thus the alcohol dependent person must consume larger amounts of alcohol in order to experi-

ence the same effects that he previously had when drinking smaller amounts.

Vision seems to be relatively unaffected by alcohol concentrations. In the presence of higher levels, however, the ability to discriminate between lights of different intensities and the resistance to glare is impaired. For example, the "drunk driver" may perceive an oncoming car is further away than it actually is. Hearing ability is similarly impaired as is the ability to discriminate odors and taste. There is little effect on the sense of touch except in the fact that pain is diminished. Generally all the sensory faculties are affected by diminishment of acuity due to the depressant action of alcohol in the brain.

The capacity of alcohol to depress, relax and give a feeling of euphoria has created the myth that alcohol enhances sexual activity. Extensive studies in animals and man indicate that alcohol, while freeing inhibitions, deteriorates sexual performance (Hart, 1968, Teitelbaum & Gantt, 1958). Case studies of alcoholics indicate that sexual relationships were disturbed, deficient, and diminished (Levine, 1955). Chronic long-term alcoholics show a tendency to premature senility including dysfunction and degeneration of the sex glands and increased sex problems in both men and women (Weller, 1930, Lisansky, 1957).

A large number of pathological conditions are the result directly or indirectly, of heavy alcohol consumption (See Table III).

ALCOHOL RELATED DISORDERS

Gastrointestinal:

Esophagitis	Esophageal carcinoma
Gastritis	Malabsorption
Chronic diarrhea	Pancreatitis
Fatty liver	Alcohol hepatitis

Cirrhosis (may also lead to carcinoma of the liver)

Cardiac:

Alcohol cardiomyopathy	Beri-beri

Skin:

Rosacea	Telangiectasia
Rhinophyma	Cutaneous ulcers

Neurologic and Psychiatric:

Peripheral neuropathy	Convulsive disorders
Alcohol hallucinosis	Delirium tremens
Wernicke's syndrome	Korsakoff's psychosis

Marchiafava's syndrome

Muscle:

Alcoholic myopathy

Hematologic:

Megaloblastic anemia

Vitamin Deficiency Diseases:

Beri-beri	Pellagra

Scurvy

Metabolic:

Alcoholic hypoglycemia	Alcoholic hyperlipemia

(DHEW-HSM 72-9095, p.82)

Table III

The more serious of the alcohol related diseases include Wernicke's syndrome, Korsekoff's psychosis, Niacin-deficiency, and Marchiafava's disease. Wernicke's syndrome shows itself in paralysis of eye nerves, clouding of consciousness, and acute severe deficiency of vitamin B_1. This disease responds well to massive doses of thiamin (Adams, 1959; Victor & Adams, 1961). Korsakoff's psychosis manifests itself in disorientation, failure of memory, and an interesting tendency to make up for the defect by substituting imagined occurrences. It often accompanies peripheral neuropathy and follows the symptoms of Wernicke's syndrome. For those patients who do not recover from this mental disorder within a few weekds, the disease may become chronic requiring prolonged hospitalization (Bowman & Jellinek, 1941; Victor & Adams). Niacin deficiency is marked by clouding of consciousness, cogwheel rigidities of the arms and legs, and uncontrollable sucking and grasping reflexes. It is due to an acute deficiency of niacin and responds to massive doses of this vitamin with the vitamin B complex. It is fatal if treatment is delayed (Joliffe & Wortis, 1951). Marchiafava's disease is a relatively uncommon degeneration of a specific portion of the brain, the corpus callosum, causing severe mental disorder. Because the behavioral symptoms are not specific it often goes undiagnosed and evidence is detected only in autopsy (Victor & Adams).

Many of the other diseases that are related to alcohol are closely associated with nutritional defects which often

accompany heavy alcohol consumption. The liver is most often affected because of its function as the "detox organ" of the body. Gout, alcoholic hepatitis, cirrohosis and cancer of the liver can be directly attributed to alcohol consumption. The muscle system and the heart are also affected by the irritant properties of alcohol and by the slowed metabolism functions of diseased liver (Blakenhorn, 1945).

Although most of the harm on the body systems by alcohol occurs after absorption, direct injury is also possible and takes place frequently in the digestive tract. A frequency of cancer in the mouth, esophagus, and stomach parts has been reported among alcoholics (Wynder & Bross, 1956, 1957). Individuals with chronic drinking problems often give evidence of pancreatic insufficiency and/or inflammation (Shaprio, Wrubble, & Britt, 1966).

Alcoholic beverages also play havoc on the body's endocrine system. Evidence has been accumulated suggesting that several glands oversecrete in the presence of large amounts of alcohol (Sereny, Rapport, Husdan, 1966). Alcohol activates the adrenal cortex which stimulates the release of its hormones. Other hormones known to be influenced by alcohol are the catecholamines, such as epinephrine (adrenalin), norepinephrine, dopamine, and serotonin (Perman, 1958, Smith & Gitlow, 1967, Anton, 1965). Alcohol acts as a diuretic and disturbs fluid balance and urinary excretion (Perman). Oxytocin, a hormone which stimulates contractions of the uterus is also inhibited by alcohol (Fuchs, A.R. & Fuchs, F.,

1969). Some alcoholic men develop testicular atrophy and enlargement of breasts (the Silvestrini-Corda syndrome), thought to be a secondary syndrome of cirrhosis. The endocrine mechanism underlying this sexual dysfunction in some alcoholic patients is still an area in need of research (Brown, 1965, Loyd & Williams, 1958).

Malnutrition is common in alcoholics, not only those in "Skid Row", but also among the middle-class and the wealthy. Because alcohol is high in calories, chronic drinkers need less food to satisfy their caloric needs. However because alcohol lacks proteins, vitamins, and minerals, satisfactory nutrient intake is not achieved. Even in cases where individuals have an adequate diet, malnutrition is still effected because alcohol interferes with the normal processes of food ingestion and digestion. The B vitamins in particularly, cannot be absorbed properly in the digestive process (Thompson, Baker, & Leevy, 1970). Scurvy, anemia, dermatosis, digestive disorder, pellagra, hypoglycemia, and beri-beri are some of the alcohol-related forms of malnutrition that may result with chronic drinking (Lieber, Rubin, and DeCarli, 1969).

Many of the illnesses that plague the chronic alcoholic are interrelated. Liver malfunction will affect metabolism. Cardiomyopathy will affect metabolism. Metabolism will affect malnutrition and inadequate sexual functioning. Alcohol is not selective when it enters the body, that is, the body as a whole organism is affected by ethanol.

THEORIES ABOUT THE CAUSES OF ALCOHOLISM

A variety of theories exist as to the causes of alcoholism. More than likely a combination of factors interrelate leading an individual into alcoholism. The theories about alcoholism's etiology may be generally categorized as physiological, psychological and sociological.

Physiological Theories

Mardones (1951) held that alcoholism resulted from a metabolic defect which requires the body to crave alcohol. Lester and Greenberg proved Mardones' work invalid (1952). Williams developed a Genetotrophic Theory, combining the concept of Mardones' metabolic defect with a nutritional deficiency influenced by a genetic trait making certain individuals more susceptible to alcoholism. However Williams was unable to support his theory with his research and experimentation (1946, 1951, 1959). Lester continued research on the Genetotrophic Theory at the Rutgers University Center for Alcohol Studies but concluded the theory could not be validated (Milt, 1976). Another physiologic explanation for alcoholism is the Endocrine Theory (Smith, 1949). Similar symptoms between alcoholics and patients with endocrine disorders prompted this theory. Further research is conflicting (Jellinek, 1970, Madsen, 1974, and Zarraw, 1960) and the general evidence seems to indicate that endocrine disorders are a result rather than a cause of alcoholism. Other physiologic theories, the Brain Damage Theory, the Metabolism (somewhat like the Genetotrophic Theory) and an

Allergy Theory have not been supported in research (Milt). Several factors make research of physiologic causes difficult. Many types of experiments cannot be performed on humans and experiments on animals are not readily translated to human behavior, particularly as most animals do not have an attraction for ethanol as does man. The development of alcohol addiction is progressive and consequently the developmental antecedents over many years may be obscured by the passage of time.

Sociological Theories

Perhaps the most controversial issue about the causes of alcoholism is whether or not it can be inherited. The question borders on physiologic and sociological data. Alcoholism runs in families and therefore appears that alcohol susceptability may be genetically influenced. Several methods for investigating whether a trait is acquired or hereditary might include family studies, twin studies, adoption studies and genetic marker studies (Milt). McClearn and Rodgers (1959, 1961, 1962) experimented with mice and thereby developed strains of these animals with a definite alcohol preference, although the quantity of alcohol consumed could not be related. Cruze-Coke (1965, 1966) presented evidence of an association between color blindness and cirrhosis and between alcoholism and color blindness. Smith and Briton (1971) found contrary evidence. Color blindness improved after nutritional treatment so that no casual connection between alcoholism and color-vision defect could be sub-

stantiated.

Jellinek, in Heredity and Alcohol (1945) describes the results of his studies with some 4,000 alcohol cases. 52% of these subjects had one or more alcoholic parents. He maintained however, that while individuals might inherit a constitution which predisposed them towards alcoholism, certain sociocultural factors must also be concurrently present in the individual's development. Bleuler, contempory of Jellinek, researched along this concept. He found that the percentage of alcoholics among a substantial number of psychiatric patients was higher than that of the general population. These alcoholics had parents with abnormal personality traits. Goodwin and Guze (1973, 1974) support this view. Their research produced evidence for an excess of abnormal and antisocial behavior in alcoholics' families. Roe (1944) showed that children raised in foster homes were no more likely to be alcoholic than their biological parents. In contrast Partanen (1966) developed an elaborate study which showed a strong correlation between alcoholic parents and their offsprings' excessive drinking. He studied 902 pairs of male twins and found that identical twins has a 52% concordance of alcoholism whereas fraternal twins had a concordance of 28%. Like Jellinek, Partanen concluded that while heredity might influence alcohol consumption, enviornmental factors were also operable . Thus, the onset of alcoholism is not entirely under biological control. Adoption studies by Roe (1944), Schukit (1972) and Goodwin (1974) gave evidence that

a substantial number of adopted children whose natural parents were alcoholic, also became alcoholic. Goodwin's study went a step further. Of those cases where an alcoholic individual had a sibling who remained with the natural alcoholic parent, there were as many alcoholics among the sons who had been adopted as among the sons who remained with the biologic parent (s). These studies argue strongly for a genetic factor causing some measure of influence on alcoholism.

It is a known fact that cultural groups have different rates of alcoholism. Sociologists and therapists have researched to learn the attitudes of various groups and how they relate to alcoholism. Drinking alcohol is a universal occurence. In primitive society alcohol provided a relief from anxiety. Horton's study (1959) holds that this reduction of anxiety is the key to understanding the acceptability of alcohol universally. Bales (1959) developed an extensive theory based on Horton's concepts. He proposes there are three ways in which culture and social organization influence the rates of alcoholism:

> The degree to which the culture operates to bring about inner tensions or acute needs for adjustment in its members.
>
> The sort of attitudes toward drinking the culture produces in its members.
>
> The degree to which the culture provides suitable substitute means of satisfaction. (DHEW-HSM 72-9099, p. 128)

Bales cites the Horton theory to support the first statement regarding the inner tensions of the members of the culture. Referring to the second point, Bales holds that certain attitudes will encourage or discourage alcoholic behavior. Where complete abstinence is a requirement of a society, the tendency to abstain is more difficult to enforce. Where there is an attitude favoring ritual drinking, as in the religious ceremonies of Orthodox Jews, there is a lower incidence of alcoholism. Convivial drinking which utilizes alcohol to symbolize solidarity in the community on the occasions of births, marriages, funerals, and any purpose for celebrating seems to engender more alcoholism, i.e. the Irish culture. A fourth attitude which supports alcoholism is what Bales terms utilitarian drinking, that is, concluding a business deal, as a hangover remedy, or a medicinal use to alleviate a real or imagined illness. Bales also suggests that some cultures provide an alternate for drinking. For example, where there are less stringent narcotic laws, alcoholism may be lowered. Cultures which encourage alternative emotional outlets such as religious ceremonies, sports, or rituals to reduce tension seem to have a lowered rate of alcoholism.

Another sociocultural theory is that of deviant behavior. From this perspective alcoholism is viewed as deviant behavior by the society's reaction. Merton (1957) suggests that the individual experiencing strain between perceived goals

will resolve the conflict in one of four ways: conformity, ritualism, retreatism, and rebellion. Alcoholism may represent either retreatism or rebellion. Another form of deviant behavior may be the deviant subculture group. A subculture may condition its members to observe behavior considered by another subculture as deviant, encouraging such behavior because of its own needs. Accordingly the attitudes of various ethnic and subcultural groups should be examined.

Milt summarizes the results of various sociological surveys researched at the Rutgers University Center for Alcohol Studies (1974):

> Two out of every three American over 21 drink: 68%
> More men drink than women: 77% to 60%
> The percentage of drinkers is higher for those in the highest socioeconomic brackets: 83%
> The percentage is lowest for those in the lowest socioeconomic brackets: 51%
> The Middle Atlantic and New England states have the highest percentage of drinkers: 83% and 79%
> The East South Central states have the lowest:35%
> In the pepulation as a whole, aged 21 and over, 12% are heavy drinkers
> Males who are heavy drinkers outnumber females who are heavy drinkers 4 to 1
> Among the religious denominations, Catholics have the highest percentage of heavy drinkers: 19%
> Followed by Lutherans: 15%, Episcopalians: 12%
> Presbyterians: 12%, Methodists: 10%, Jews: 10%, and Baptists: 7%.
> Comparison by ethnic group shows that 30% of the black populations abstains, compared with 31% of the white population.
> Heavy-drinking rate for Blacks is 14%; for Whites: 12%
>
> (p. 63-64)

Milt reviews the drinking patterns of Italians, Jews, Chinese, Irish, American Indians, Blacks, and the French.

According to Milt, Italian Americans drink a great deal but few become alcoholics. They give strong approval to drinking, even by children (wine). Occasional drunkenness is accepted, but not condoned. Significantly Italians in Italy and first generation Italians in America drink primarily wine. Second and third generations drink more distilled spirits, and have a higher frequency of intoxification. Jewish people drink a great deal also, but do not produce many alcoholics. Considerable drinking is done as past of ritual and religious functions such as wedding blessings, religious holidays and Passover. The stricter the Orthodoxy however, the lower the inclination to overdrink. Drinking in general is neither advocated nor denounced, but taken in stride. Milt theorizes that Jewish people abhor violence and loss of emotional control which is characteristic of drunkeness, and many Jews have been raised with the concept that drunkeness is a gentile vice, often associated with the many years of religious persecutions experienced abroad.

Snyder (1962) and Barnett (1955) studied the drinking patterns of Chinese Americans and found the rate of alcoholism low despite the fact that drinking was widespread. Drinking takes place primarily at social functions and in the home and the general attitude sanctions drinking while disapproving of drunkenness. Intoxication is highly frowned upon and ridiculed, which seems to provide a deterrent to future episodes. Chinese women drink only after marriage and drunkenness in the women is severely frowned upon.

In contrast with the Italians, Jews, and Chinese in the United States, the Irish stand out as a group high in frequent drunkenness and a high rate of alcoholism. Heavy drinking is viewed as a way to deal with problems. Robert Bales, in Attitudes Toward Drinking in the Irish Culture (1962) points out that among the Irish there is no ritual drinking but continuous usage to satisfy hunger, pacify guilt, get warm, relieve sexual and agressive tension, dispel fatigue, and promote sleep. Irish folklore and customs are threaded with tales of drinking and the hospitality of alcohol. Wherever Irish in America remain a cohesive social group, alcoholism is high.

Leland (1975) and Dozier (1966) investigated the myths about the drinking patterns of American Indians who are believed to have an inordinate craving for alcohol and to respond wildly to drink. The result of their studies was to disprove these myths. Drinking however is many times higher for Indians than for the general population as a whole. Dozier attributes this to the fact that many Indians have intermarried. Drinking appears to be higher where Indians have moved to urban areas. Where the tribe has remained in tact with its religious customs and tribal rites and where economic levels are stable as with the Pueble Indians of Arizona, alcoholism and drinking remain at low rates..

Among Black Americans the rate of alcoholism is 2 to 5 times higher than for whites, and the ratio of female alcoholics to males is higher. Motivation for drinking seems

to be the modification of reality than to socialize and intoxication to unconsciousness is excessive (Milt).

In reviewing the drinking patterns of these few ethnic groups, the issue seems to be not that drinking exists and is condoned or opposed in various cultures, but how much drinking takes place at a given time. Dr. Morris Chafetz holds that alcohol should be the servant not the master of man (1965). He writes:

> Alcohol used regularly, a bit every day, is not the danger. The danger lies in overindulgence and intoxication...The average drinker equalizes restraint with release by indulgence within his personal capacity... Undue restraint is as unhealthy and stifling as excess in the other direction...if we find ourselves habitually overdrinking certainly we cannot blame the liquor for what is wrong inside ourselves. (p. 222-223)

Psychological Theories

Is there an alcoholic personality type is the question psychiatrists and psychologists probe. Trait theorists, psychoanalysts, and learning theorists have attempted to gain a clearer understanding of the personality of the alcoholic. A difficulty in research is that available subjects are generally already alcoholic and it is difficult to determine whether certain personality traits existed before the individual became troubled by alcohol or whether these traits are the result of prolonged drinking.

Psychodynamic explanations of the causes of alcoholism

may rest on various viewpoints within the psychoanalytic school. The analytic orientation concerns itself primarily with disturbances in the personality in infancy and childhood. As the infant grows, he may become fixated at the Oral, Anal, Phallic, Latent stages. If he does successfully transcend these stages, analysts say, the individual may regress to one of them in times of stress and anxiety. In the oral stage there is need for unlimited love, narcissistic self-love, clinging to mothering persons, depressive moods when love support is not forth coming, intolerance of frustration, pain, anxiety, irresponsibility and emotional instability. These traits are found among the "primary alcoholics". At the Anal stage of personality development the individual begins to assert himself. Persons fixated at this stage manifest agressiveness, obstinacy, rebelliousness, a drive for mastery and achievement, and actively rather than passively manipulate the enviornment. Love relationships are directed to others. Since alcohol releases inhibitions, many of these traits become overt during drunkenness. Individuals who have not sucessfully worked through the Phallic-Oedipal stage may have a strong attachment to a mother, are unable to cope with authority figures (father substitutes), direct themselves in sexuality to members of the other sex, tend to be friendly affable, form superficial relationships (while repressing anger, fear of sexual inadequacy, low self-esteem, competitiveness, and compensatory activities). Such persons who have made unsuccessful transi-

tions through these stages may enter adult life with unconscious, continuous, and unexplainable anxiety. Under the influence of alcohol, a person can feel cared for, safe, warm, and at the same time feel "adult", assertive, and non-dependent.

Reviewing the literature of Freud, Fenichel, Menninger, Levy, Zwerling and Rosebauum, and Coleman, Million (1959) concludes four categories of coping mechanisms are exercised by alcoholics:

> Self-image enhancement: providing a feeling of well-being and omnipotence and bolstering self-esteem and confidence;
>
> Disinhibition of restraints: allowing previously controlled impulses such as hostility or extramarital and homosexual inclinations to be released without feeling personal responsibility and guilt;
>
> Dissolution of psychic pain : alleviating the anguish of frustration and disappointment as in a "dead-end" job or a hopeless marriage or blotting out awareness of one's loneliness, meaningless existence and feelings of futility;
>
> Masochistic self-destruction: relieving one's sense of guilt and worthlessness by destroying one's career or breaking up one's family. (p.488-89)

The variety in alcoholic coping mechanisms, some which seem to be contradictory, make the clarification of an "alcoholic personality type" difficult. It seems more likely

IDENTIFYING THE ALCOHOLIC

The alcoholic is just like every other person except for one quality, his/her need to have alcohol. There is a typology that pictures the alcoholic as the Skid Row derelict. In truth, about 3 to 8% of all alcoholics are the Skid Row types (Tracy, 1975). Alcoholism is found in every socio-economic class. The rate of alcoholism seems to be higher among men and women in the professions, law, medicine, education and the clergy. Creative people, such as artists, musicians, writers, and actors are particularly vulnerable. There is no such thing as the typical alcoholic. The National Institute of Alcohol reported (1975) that more than 70 percent of the known alcoholics live in respectable neighborhoods, with their spouses, send their children to college, are respectable citizens, and function more or less in their jobs. These known alcoholics have acknowledged their problem and been provided with opportunities for rehabilitation to varying degrees, and thus they continue to function as constructive members of society. Though drinking is on the increase with teenagers and college students (DHEW 76-361, 1975) there are fewer alcoholics because of the progressive nature of the disease. Drug addiction, which is more quickly developed is more common than alcohol addiction. Women alcoholics tend to hide their drinking habits more as do the wealthy.

To assist individuals in determining if they or a family member or a friend are alcoholic, the John Hopkins Hospital

in Baltimore, Maryland, developed a questionnaire that has been highly successful, particularly in industrial programs (Tracy):

1. Do you require a drink in the morning?
2. Do you prefer to drink alone?
3. Do you lose time from work due to drinking?
4. Is drinking harming your family in any way?
5. Do you crave a drink at a definite time daily?
6. Do you get the inner shakes unless you continue drinking?
7. Has drinking made you irritable?
8. Does drinking make you careless of your family's welfare?
9. Have you thought less of your spouse since drinking ?
10. Has drinking changed your personality?
11. Does drinking cause you bodily complaints?
12. Does drinking cause you to have difficulty in sleeping?
13. Does drinking make you restless?
14. Does drinking make you impulsive?
15. Have you less self-control since drinking?
16. Has your ambition decreased since drinking?
17. Has your initiative decreased since drinking?
18. Do you lack perseverance in pursuing a goal since drinking?
19. Do you drink to obtain social ease?
20. Do you drink to gain self-encouragement?
21. Do you drink to relieve marked feelings of inadequacy?
22. Has your sexual potency suffered since drinking?
23. Do you show marked dislikes or hatreds since drinking?
24. Has your jealousy, in general, increased since drinking?
25. Do you show marked moodiness since drinking?
26. Has your efficiency decreased since drinking?
27. Has drinking made you more sensitive?
28. Are you harder to get along with since drinking?
29. Do you turn to an inferior enviornment since drinking?
30. Is drinking endangering your health?
31. Is drinking affecting your peace of mind?
32. Is drinking making your home life unhappy?
33. Is drinking jeopardizing your business--your job?
34. Is drinking clouding your reputation?
35. Is drinking disturbing the harmony of your life? (p. 19)

A yes answer to several questions serves as a definite warning that a drinking problem exists. A large number of

positive responses indicates alcoholism. Kent (1967) itemizes symptoms according to the various stages of alcoholism.

> Early stages: great fondness for drinking, not eating with people who don't drink; not eating at all; looking forward to parties and gatherings where there will be a great deal of liquor; drinking before parties where liquor will be served; feeling you cannot function without alcohol; lying about getting "high"; making sure there is always a supply in the house; sneaking drinks; "needing" to drink at a certain time of the day; looking forward to drinking alone; drinking to go to sleep; not caring about look or conversely, becoming overconscious of looks; foggy thinking; slacking on work; drinking, for any reason in the morning; lying to family and friends especially about drinking.
>
> Intermediate stage: getting fat and jowly-looking; nightmares and not sleeping, except when passed out; complete loss of efficiency at job, home, school; inability to discern the truth; enormous guilt feelings about everything; not caring about anything; blackouts; feeling sorry for oneself constantly; resenting everyone else; very very low frustration tolerance, hating yourself; taking pills, loss of jobs, spouse leaving or threatening to leave, children avoiding; loss of physical control; jealousy, running to doctors, drunk on weekends--or every night; doing anything to get a drink; waking up in strange beds; thinking of nothing else but drinking; suicidal thoughts; shakes; feelings of hopelessness and worthlessness; lack of concern about family, religion, moral ethics.
>
> Late stages: nothing concerns you but alcohol; physical symptoms of disease about which nothing is done; foggy and confused all the time; drinking cheaper and cheaper types of alcohol, stays in hospitals, sanitariums, institutions; delirium tremens; DEATH.
>
> (pp. 34-36)

Bacon (ANDATEC, 1977) has categorized the stages of alcoholism into three stages: prealcoholic, early alcoholism, and late alcoholism. He traces 21 steps in the progressive process of addiction.

Prealcoholic Phase

1. Start of drinking more on most drinking occasions

2. Number of drinking occasions increases
3. More and more frequent episodes of drunkenness
4. Hangovers become more frequent and the psychological impact becomes as marked and unpleasant as the physiological impact
5. First "blackouts" or alcohol-induced amnesia
6. Extravagant behaviors, especially in money matters
7. Excessive rationalization about drinking

Early Alcoholism (marked by loss of control)

8. Sneaking and gulping drinks
9. Solitary drinking
10. Morning drinking
11. Antisocial acts
12. Attempts to change pattern of intake (times, places, types of beverage, "water wagon")
13. Resentments, anxieties
14. Social changes (family, job, etc.)
15. Formal attempts to get help

Late Stage Alcoholism

16. Bouts (benders)
17. Unexplained fears
18. Social collapse (lowered standards, loss of group membership)
19. Protecting alcohol supply
20. Tremors, hallucinations
21. Breakdown of rationalism structures, psychosis

TREATMENT

In reviewing the variety of causes, the ill effects, and the progressive nature of the disease called alcoholism, the question remains, where does treatment begin? A thorough and effective treatment plan must recognize that a progressive rehabilitation procedure, a continuum of care by various professionals, individuals, agencies, social groups, families friends, employers is needed. The National Council of Alcoholism suggests a systems approach (DHEW-HSM72-9099) which includes treatment of the biological, intrapsychic, interpersonal, social groups, and society-at-large factors of the pr-

blem. Alcoholics may be referred for treatment in a variety of ways, and to a variety of treatment sources. A troubled spouse, friend, or family member, a police bureau, a pastor or rabbi, a doctor, a judge, or the alcoholics themselves may be the source of referral. The individuals or groups looked to for help may be Alcoholics Anonymous, private therapists, mental health agencies, hospital social services, private psychiatric hospitals, state psychiatric hospitals, the Salvation Army, halfway houses, doctors, and ministers, to name a few. The kind of treatment an individual receives depends on whether the alcoholic has acknowledged the need for help, how far the alcoholism has progressed, and the availability of resources for alcohol rehabilitation for that individual.

If an alcoholic is self-referred, the initial barriers to treatment may be lowered. If the individual is "coerced" by spouse, employer, judge, for instance, treatment will necessarily have to explore and attempt to determine how much initial resistance exists. When a non-alcoholic family member seeks help a different approach is needed. Fajardo (1976) suggests a series of steps to encourage the alcoholic to seek rehabilitation. Family members should attempt, as best as possible to maintain an atmosphere of tranquility in the home irregardless of the alcoholic's behavior, refusing to condone or to condemn the situation, but to apparently ignore it. After several weeks, states Fajardo, the family member(s) should announce that they are going to seek

therapy in order to cope with the alcoholism in the family. The alcoholic is invited to come along or stay behind, placing the responsibility on the individual, but again the announcement should be made with little fanfare or rationalizing. Alcoholics are masters at rationalizing and such an approach rarely is fruitful (Milt, Davis & Harrison, 1974). Fajardo maintains that this procedure has been highly successful and within a month most alcoholics are seeking treatment. Perez (1977) advocates two types of intervention, 1) individual-persuational and 2) coercive. The first method has less than average success with alcoholics due to the resistance and rationalizing factors, but may have to be used when there are few or no significant persons in the alcoholic's life. The second method, coercion, can be used with a threesome, the alcoholic, the therapist, and the other person, i.e. a doctor, spouse, probation officer, or a group, preferably of persons significant to the alcoholic. The goal is to help the alcoholic, however grudgingly, see and accept his situation so that he/she can accept the need for help. The important factors, maintains Perez, are genuine concern, a non-judgemental attitude, and no direct confrontation. Members of the group are asked to list specific data they have observed about the alcoholic's behavior, including dates and hours. A non-judgemental statement might be, "Did you know that when you were drinking you...(did)..." Denials should be responded to with concerned caring and acknowlegement that the individual is not always aware of his be-

havior, but forgiving nevertheless. This gives the problem drinker an opportunity to own his behavior while not accepting the full guilt at this point in therapy. Opportunities must then be given for the alcoholic to make choices about future directions, but with immediate goals and plans spelled out. Sometimes it may take several days or weeks before the impact of the session with people who care and are significant to the drinker takes effect.

Some individuals are "coerced" into treatment by a crisis event that has resulted from their intoxication. Such calamities might include serious auto accidents, painful hospital stays, a spouse or a child leaving or threatening to leave, loss of a job, or an arrest for violence. Often at these crisis points the alcoholic is "ripe" for therapy and follow up and prompt delivery of rehabilitation services may be the turning point for this individual.

Once the alcoholic has acknowledged his illness and addiction, his physical condition must be considered in order to determine an adequate treatment plan. Treating the alcoholic must be individualized to each patient's physical, psychological and social needs. There is no general fool-proof therapeutic method to follow, anymore than there is only one way of treating all cancer patients, without defining and determining their specific cancers. Every alcoholic seeking help should have the services of a physician, and one who is trained in alcoholism. Ideally every alcohol treatment center and community mental health agency should have a medical

doctor on their staff, at least on a consulting basis. Many hospitals provide such services. Unfortunately, many doctors, nurses, medical personnel, and even counselors and social workers have negative attitudes towards alcoholics. Alcoholism, for many, is still viewed as a moral ill which the individual should use "will power" to control. Medical schools give little attention to alcohol training. More often than not, lectures to residents concentrate on bio-chemical aspects of the disease and its related illnesses without regard to psychological and social aspects. The New Jersey College of Medicine and Dentistry has been a forerunner in the U.S. in giving a broader approach to alcoholism to its medical students and resident interns[5]. Schools of nursing might do well to imitate the example given by the NJCMD.

Once an alcoholic has been referred, the first assessment is to determine whether or not the individual needs detoxification. Detoxification is the treatment of the acute medical symptoms, as a first step to rehabilitation. An addicted individual who attempts to detox without medical assistance may become comotose and die. One of the main factors affecting the process is that dehydration may occur during withdrawl. The usual procedure, under medical guidance is to supply anticonvulsant and sedative compounds to prevent seizures and dellirium tremens (Brune, 1971; Gross, 1967, Kissin, 1968). Patients must also be examined to detect the presence of other alcohol-related illness. Detoxification may take 3 days or more.

Many professionals err in believing that once detoxification is complete, the alcoholic has been cured. Treatment must continue to heal the psychic illnesses and social dysfunctions of the individual. Psychotherapeutic schools vary widely as to what methods should be used. The variety of treatment is as manifold as the variety of patients and perhaps therein lies the key. Any alcohol treatment plan, to be effective, must be tailored to the individual alcoholic. The counselor must acquaint himself with the client's past and present social history, his relationships with significant persons, his economic status and his present medical condition.

Individual or group psychotherapy may be used or perhaps both either concurrent or in sequence. Psychoanalytically oriented psychotherapy coupled with some behavioral methods may also be helpful (Lazarus, 1971, 1972). Family therapy is a preferred mode for many alcohol counselors whenever the alcoholic's relationships are still intact, however minimal. Transactional Analysis gives insight as to the kinds of manuevering and rationalizing an alcoholic may be using with family and friends and how they in turn, whether consciously or unconsciously, encourage the alcoholic to game play (Steiner, 1971). Psychotherapists disagree as to whether total abstinence is the only measure of success (Bolman, 1965; Davies, Scott & Malherbe, 1969). Recovered alcoholics, working under the guidance of professionals can be effective alcohol therapists. Psychodrama,

role playing, sensitivity groups, and controlled use of drugs have also been helpful adjuncts to treatment. Membership in Alcoholics Anonymous is required by many therapists who more recently recognize the valuable support such groups can provide.

A vital part of the alcohol counselor's approach to therapy is the counselor's own person. Every counselor must examine his or her own attitudes towards alcoholism and their own drinking pattern, and this self-analysis must be ongoing throughout the treatment program. Many counselors become discouraged by the low success rate that often comes in working with alcoholics. Perhaps the therapists need to determine what "success" is in working with these clients. An alcoholic who has abstained or remained sober for several months or years and then goes on a drunken spree is not necessarily a therapy "drop out". The counselor should consider the overall functioning of such a client and should recall whatever progress has been made, however intermittent or seemingly temporary. Occasional failures may and often are an opportunity for greater growth on the part of both counselor and patient. In the early stages of therapy, perhaps more so with alcoholics, the counselor must provide the opportunity for dependency, but must also enable the alcoholic to be aware of his own strength and gradually wean the client to take full decision-making responsibility for the direction of his life. This may include working with the client to locate economic and vocational resources to stabilize the re-

habilitation process.

In considering the total enviornment of alcoholics, attention must be given to education of the public at large, as well as professionals, about the nature of alcoholism. The New Jersey Division of Alcohol, an agency under the jurisdiction of the State Department of Health, provides information, seminars, peer group training for school children and youths, and printed materials to interested individuals, and organizations. In addition, frequent communication releases are made to the news media with a view to adult education. Seminars are provided free of charge for employees of state and private agencies and hospitals who assist the alcohol abuser and/or his family or employer. Students seeking such related careers may also participate in the seminars. A co-operative effort is being made at the present time, to upgrade alcohol education in the schools and the N.J. Department of Education is working with the Division of Alcohol to develop curriculum guides for alcohol education. The teenage population is considered the primary target. In addition, the Department of Labor and Industry is developing certification requirements for alcohol counselors. The Motor Vehicle Agency, coordinating with the Department of Banking and Insurance and the Division of Alcohol, is planning and has already implemented programs for rehabilitating alcoholic traffic offenders. Hopefully these efforts will help dispel some of the current myths about alcoholism.

ATRA AND THE DEVELOPMENT OF REHABILITATION FACILITIES

A major impetus providing legal force for establishing rehabilitation services for alcoholics in New Jersey was created by the passage of the Alcoholism Treatment and Rehabilitation Act (ATRA), which was effected on May 9, 1977. As previously indicated (refer to page 10), it is a repeal of Public Law 1948, c.453 (c.26:2B-1) which made public drunkeness subject to arrest and prosecution. The aim of ATRA is the legal consideration of alcoholism as a disease rather than a moral or criminal problem. Specifically:

> It is the policy of the State of New Jersey that alcoholics and intoxicated persons may not be subjected to criminal prosecution because of their consumption of alcoholic beverages, but rather should be afforded a continuum of treatment in order that they may lead normal lives as productive members of society. (C.26:2B-7)

"Alcoholic" is defined within the law to mean "any person who chronically, habitually, or periodically consumes alcoholic beverages to the extent that 1) such use substantially injures his health or substantially interferes with his social or economic functioning in the community on a continuing basis, or 2) he has lost the power of self-control with respect to the use of beverages."

ATRA also provides for a Division of Alcoholism in the State Department of Health with a director and an assistant to the director, creates an advisory council on alcoholism,

provides for the licensing of alcoholic treatment facilities, prescribes procedures to be followed concerning the arrest of an intoxicated person, authorizes the establishment of service forces, prohibits and repeals county and municipal ordinances and resolutions prescribing penalties for public intoxication, and repeals the former law calling for the arrest of intoxicated persons. Persons who are "restrained" by police while intoxicated must be given the opportunity within 24 hours to opt for rehabilitation in lieu of incarceration. In the case of a conviction for a major crime committed during intoxication, the rehabilitation period is contributed to shorten the sentence.

Detoxification is not a sufficient form of treatment because research and experience have shown that alcoholism involves physical, psychological, and social causes and influences. Long range treatment must be provided to assist the alcoholic in recreating a life style that is free of alcohol dependence. In addition to the prescribed methods of treatment after detox such as drug therapy, individual, group and/or family psychotherapy and education, the alcoholic is often economically in need so that vocational rehabilitation and/or taking residence in a halfway house may be necessary. Even in cases where an alcoholic may have a family and a home to go, it is sometimes more therapeutic if the patient can be removed from the home enviornment during the first stages of rehabilitation after detox.

ATRA provides for a comprehensive state plan, encoura-

ging a continuum of care, to be developed by the Division of Alcohol for the treatment of alcoholics, including juveniles and young adults. Such a continuum of care calls for the co-operation of state, federal, and private agencies, organizations and individuals. Regionalization of services is encouraged, and if not otherwise available, should provide for the following facilities: 1) intoxication treatment centers rendering 24 hr. emergency medical care; 2) inpatient facilities, for treatment of alcoholics to be affiliated with a general hospital, mental hospital, community mental health center, or other hospital; 3) out-patient facilities; 4) halfway houses or other such residential aftercare facilities.

The implementation of the Alcoholism Treatment and Rehabilitation Act may take several years because of the shortage of rehabilitation facilities and adequately trained personnel. While all general hospitals could be mandated by the State Department of Health to provide treatment for Alcoholics, much of this service is limited to detoxification. Successful rehabilitation, however, calls for assisting the alcoholic in restructuring his life style and ways of interrelating and this sometimes means radical changes in the patient's social groups, vocation, and home life.

Presently there are 19 intermediate care facilities in the state (Directory for Rehabilitation of Alcoholics in New Jersey). Of these, two are federally funded and the remaining 16 are private agencies. Of the 18 facilities, only 6 will accept patients from the entire state: High View of

Hope, Little Hill-Alina, Maryville Colony, Mt. Carmel Social Center of Paterson, Salvation Army Men's Social Services of Paterson, and Dudley House. Of these 6 facilities serving the entire state, the four houses serving middle and low-income clients are open only to men. Women who cannot afford such services and who also cannot function in the larger social milieu are often placed in state mental hospitals for "after care" services. As of [illegible]s writing plans are underway to open women's halfway houses in Ocean, Mercer and Hunterdon. The Mercer County project in a nearby Township has been rejected because local residents convinced officials that such a house would attract undesirable women who would unduly influence the youth of the area. The township officials therefore refused to amend the zoning rules for a farm which had been offered to the Division of Alcohol as an outright donation for the purpose of assisting alcoholic women (The Princeton Packet, 1977).

Some halfway houses offer day programs, particularly where there is a well-trained staff and resources. Other facilities have stringent regulations, including membership in a particular religious group with a promise of service after rehabilitation, or a residency requirement in a particular town or county. The two federally funded houses are Dudley House in Plainfield, whose residents must be low income, and Seabrook House, in Seabrook, which is a Demonstration Project as well as research and training center sponsored by the National Council of Alcoholism.

Name of Facility	Hours	Fees	Area Served	Requirements-Comments
1. Flynn House Elizabeth	9-5 (adm.)	$25.00 per wk.	Elizabeth area	Male, sober on admission Monday through Fridays
2. Flynn House Jersey City	9-5 (adm.)	$25.00 per wk.	Jersey City area	Male, sober on admission Monday through Fridays
3. Goodwill Home & Rescue Mission	24 hrs. 7 days	None	Newark	Residents must sign a statement agreeing to follow Mission Programs and stay sober
4. High View of Hope Blairstown	24 hrs. 7 days	$525.00 per 3 wks.	State	Minimum 3 wk. stay; $525.00 payable on admission; $175 additional per wk.; detox on director's discretion; affiliated physician
5. Keswick Colony Whiting	24 hrs. 7 days	None	Whiting Township	Serves residents of Whiting only; males only; 3 mo. required stay; no smoking
6. Little Hill-Alina Blairstown	24 hrs. 7 days	$35.00 per day	State	$35.00 per day plus incidentals; $980 payable on admission; minimum 6 wks. stay for straight alcohol; 12 wks. related substance abuse; must be non-psychiatric; ambulatory no nursing care needs.
7. Market St. Mission	16 hrs. 7 days	None	Morristown area	Sober, reasonable good health under 60 yrs. old
8. Maryville Colony	24 hrs. 7 days	$50.00 on adm. per wk.	Unrestricted	Male; admitted alcoholic; medical certificate stating freedom from contag. disease; 28 days minimum

Alcohol Rehabilitation Half-Way Houses in New Jersey

Facility	Hours	Fees	Area Served	Requirements-Comments
9. Mt. Carmel Social Center-Hospital McNulty House & Rehab.	24 hrs. 7 days	$257.00 for detox No fee for use of center	State	Three affiliated facilities under Mt. Carmel; no physical complications requiring general hospital care. For residential: Male, 17 minimum age; able to work
10. Rescue Mission of Trenton for Men, Trenton	24 hrs. 7 days	None	Trenton area	Sheltered residence for homeless alcoholic; family services limited; no charge because clientele are usually lowest socio-economic level
11. Salvation Army of Delaware Valley	24 hrs. 7 days	None	Trenton area	Men; spiritual program followed, work therapy, leisure, counseling; handicaps must be treatable.
12. Salvation Army Social Center of Atlantic City	24 hrs. 7 days	Sliding fee	Atlantic City area	Rehabilitation and/or spiritual regeneration of unattached and homeless men
13. Salvation Army Social Center of Jersey City	24 hrs. 7 days	None	Jersey City	Men; spiritual program, work therapy, counseling, leisure, treatable medical problems.
14. Salvation Army Social Service Center	24 hrs. 7 days	None	Newark area	Must have treatable handicap; minimum 30 days stay; limited stay after obtaining employment
15. Social Service Center Salvation Army, Paterson	24 hrs. 7 days	None	State	Ambulatory; willing to work; in need of assistance

Facility	Hours	Fees	Area Served	Requirements-Comments
16. Honesty House-Vale Foundation Stirling	24 hrs. 7 days	$540.00 in advance	Passaic Township preferred	Minimum three wks stay; must be ambulatory
17. Dudley House Plainfield	24 hrs. 7 days	None	State	Men only; low income; able to be vocationally rehabilitated; 3 mo. to 6 mo. stay; sober on arrival
18. Seabrook House Seabrook	24 hrs. 7 days	Insurance No one refused	Southern Counties	Free of all mood changing drugs, resident of Cumberland, Cape May, Atlantic, Salem, Camden, Glouscester, or Burlington Counties; Federally Funded demonstration project for future treatment of alcoholics nationwide.
19. Starting Point Burlington	24 hrs. 7 days	Insurance No one refused	Burlington County	Men or women; county residents only, total program includes family and employers; affiliated with New Routes A.L.I.A.A., Detox available followed by New Routes 28 day program and 8 week follow-up.

FUNDING

One of the most pressing problems in providing a continuum of care for the alcoholic in New Jersey is funding. Two recent developments appear to make the economic difficulties surmountable: 1) A.L.I.A.A. grants, and 2) a series of legislative acts. A.L.I.A.A. grants or Aid to Low Income Alcoholic Anonymous are federal funds which have been assigned to New Jersey. The purpose of the A.L.I.A.A. grants is to establish residential and day programs for the treatment of low and moderate income alcoholics. Any private or public group may apply through the New Jersey Division of Alcohol or the State Law Enforcement Agency.

On-going treatment can now be funded through a series of legislative acts passed in New Jersey since May of 1977. They include mandatory health insurance coverage for alcoholism. Prior to the passage of these bills insurance carriers, such as New Jersey Blue Cross/Shield, Prudential, or Travelers were not obligated to pay for alcohol treatment beyond detoxification. Physicians and psychiatrists would often indicate some diagnosis, other than alcoholism, whenever possible to try to assist their patients, but this excluded the early alcoholic who might not have had any other major disability. In June of 1977, four bills, A1718, A1719, A1720, and A1722 were signed by the governor after passage in both houses. They require that hospital benefits and outpatient benefits be included the same as for any other illnesses by all New Jersey Insurance carriers. Alcoholics are thus entitled to

treatment up to the same amount of benefit days as they would have had for any other illness. Earlier, in February of 1977, S1423 became law. This bill substitutes education and treatment in lieu of extended periodic revocation of licenses for driving while under the influence. Revocation of licenses are still in effect for this offense but restoration can only take place if the offender successfully completes an alcohol education or treatment program. The time of license revocation is shortened if the course is completed before the required suspension time (New Jersey Alcoholism Association Newsletter, 1977).

THE FUTURE FOR A CONTINUUM OF CARE: A MODEL PROGRAM

A sample for the near future of the kind of continuum of care program for alcoholics that can be established in a given locale is New Routes of Burlington County.[6] New Routes, established in 1976 was made possible by an A.L.I.A.A. grant. The future of the program looks hopeful because of the recent legislation which will enable it to continue operating. Located in Burlington, the agency is non-profit and sponsored by the Burlington County Alcohol Program. It operates Monday through Friday, 8:30 a.m. to 10:30 p.m. Open House is on Sunday afternoon. The fees are $10 to $12 per day, with an additional $10 per individual counseling session and $5 per group therapy session. Alternative methods of payment are explored but no one is turned away for lack of funds. With the passage of the new legislation, claims may be sub-

mitted to health insurance carriers. The facility serves Burlington County Residents and there are no other admission requirements. The philosophy of New Routes is that alcoholism is a progressive, incurable, fatal disease that affects people of all walks of life and all ages. It is treatable and individuals can become constructive, achieving people who are able to enjoy full life. The out-patient part of the program attends to the physical, emotional, and social phases of alcoholism. Emphasis is on a supportive atmosphere that encourages active, responsible participation in individual and group therapy, nutrition seminars, recreational and exercise activities, occupational therapy, resocialization and discussion groups, weekly AA meetings, lectures, and film presentations. Clients are asked to make a commitment for daily attendance at the center for the initial 28 day phase, and weekly visits thereafter for a period of 8 weeks. Families are encouraged to participate in the program also. Individual and group therapies are offered to enlighten and aid the parent, spouse, and/or child in understanding the disease and its effect on their lives.

The program at New Routes has been developed to help not only the alcoholics themselves, but relatives, friends, employers, and clergymen. Efforts are made to design a personalized program for each prospective client. Transportation can be provided for clients who would not otherwise be able to participate in the program. Efforts are

currently being made to co-ordinate services with the Division of Vocational Rehabilitation and other agencies in the county. For those in the acute stages of alcoholism, or in need of detoxification, a residential course can be arranged at Starting Point, a mile down the road. After completion of the program at New Routes, clients may apply to admission in the New Routes Alumni Association. Evening groups with special focus occur within the association such as family, women's groups, young people, etc. New Routes also serves as an information and referral source and provides consultation and education to agencies, schools and other representative groups. Approximately 25 alcoholics at a time utilize the program with additional friends and family involved in the evening and weekend projects. The staff includes one part-time administrator, one therapy director, three counselors (one licensed in marriage and family therapy), 5 physicians on contract, one secretary, and one clerk/driver, plus approximately 100 volunteers.

It is estimated that in approximately three years a network of facilities, similar to New Routes will exist throughout New Jersey. The "patient has been identified", the treatment is daily becoming more readily available, and the prognosis is good. Chafetz states well,

> ...Alcohol has existed longer than all human memory. It has outlived generations, nations, epochs, and ages. It is part of us, and that is fortunate. For although alcohol will always be the master of some, for most it will continue to be a servant. (p.223)

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